

ABSTRACT OF THE DISCLOSURE

The difference frequency component between a first fundamental wave of frequency f and a second fundamental wave of frequency f_2 is caused to interact with a second harmonic wave, thereby to attain the enhancement of a second harmonic signal, etc., whereby a reflected wave component to be imaged is extracted at a high S/N ratio. By way of example, in a case where the difference frequency component is to appear on the lower frequency side of the second harmonic wave of the first fundamental wave so as to be superposed on this second harmonic wave, the frequencies are set at $f_2 = 2.8f$ or so. Besides, in a case where the difference frequency component is to appear on the higher frequency side of the second harmonic wave of the first fundamental wave so as to be superposed on this second harmonic wave, the frequencies are set at $f_2 = 3.2f$ or so.